

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.                                 | FILING DATE                            | FIRST NAMED INVENTOR   | ATTORNEY DOCKET NO. | CONFIRMATION NO.         |  |
|---|--|------------------------|---------------------|--------------------------|--|
| 09/910,676                                      | 07/20/2001                             | Adam Geoffrey Kerrison | 3882/7 3192         |                          |  |
| 29858 7.  | 7590 04/14/2006                        |                        | EXAMINER            |                          |  |
| BROWN, RAYSMAN, MILLSTEIN, FELDER & STEINER LLP |  |                        | LAZARO, DAVID R     |                          |  |
|   | 900 THIRD AVENUE<br>NEW YORK, NY 10022 |                        |                     | PAPER NUMBER             |  |
| •   |  |                        | 2155                |                          |  |
|   |  |                        |                     | DATE MAIL ED: 04/14/2006 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  | Application No.                            | Applicant(s)      |  |  |  |  |
|--|--|--|-------------------|--|--|--|--|
| Office Action Summary  |  | 09/910,676                                 | KERRISON ET AL.   |  |  |  |  |
|  |  | Examiner                                   | Art Unit          |  |  |  |  |
|  |  | David Lazaro                               | 2155              |  |  |  |  |
|  | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply |  |                   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filled after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filled, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |  |                   |  |  |  |  |
| Status   |  |  |                   |  |  |  |  |
| 1)⊠  | Responsive to communication(s) filed on 26 Ja  | nuary 2006.                                |                   |  |  |  |  |
| 2a) □  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.   |  |                   |  |  |  |  |
| 3)   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is    |  |                   |  |  |  |  |
| <i>,</i> —   | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.                  |  |                   |  |  |  |  |
| Disposition of Claims  |  |  |                   |  |  |  |  |
| 4)⊠ Claim(s) <u>1-21 and 23-26</u> is/are pending in the application.  |  |  |                   |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |  |                   |  |  |  |  |
| 5) 🗌   | 5) Claim(s) is/are allowed.  |  |                   |  |  |  |  |
| 6)⊠  | 6)⊠ Claim(s) <u>1-21 and 23-26</u> is/are rejected.  |  |                   |  |  |  |  |
| 7)   | 7) Claim(s) is/are objected to.  |  |                   |  |  |  |  |
| 8)□  | Claim(s) are subject to restriction and/or   | r election requirement.                    | ·                 |  |  |  |  |
| Applicati  | ion Papers   | •  |                   |  |  |  |  |
| 9)   | The specification is objected to by the Examine  | r.   |                   |  |  |  |  |
| 10)  | The drawing(s) filed on is/are: a) ☐ acce  | epted or b) $\square$ objected to by the E | Examiner.         |  |  |  |  |
|  | Applicant may not request that any objection to the  | drawing(s) be held in abeyance. See        | e 37 CFR 1.85(a). |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |  |                   |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |  |                   |  |  |  |  |
| Priority (   | ınder 35 U.S.C. § 119  |  |                   |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:   |  |  |                   |  |  |  |  |
|  | 1. Certified copies of the priority documents have been received.  |  |                   |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |  |                   |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |  |  |                   |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |  |  |                   |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |  |  |                   |  |  |  |  |
|  |  |  |                   |  |  |  |  |
|  |  | ,  |                   |  |  |  |  |
| Attachment(s)  |  |  |                   |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date.  |  |  |                   |  |  |  |  |
|  | e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)         | ite<br>atent Application (PTO-152)         |                   |  |  |  |  |
|  | r No(s)/Mail Date  | 5)   |                   |  |  |  |  |

Application/Control Number: 09/910,676 Page 2

Art Unit: 2155

#### **DETAILED ACTION**

1. This office action is in response to the RCE filed 01/26/2006.

- 2. Claims 1, 3, 4, 25 and 26 were amended.
- 3. Claim 22 is canceled.
- 4. Claims 1-21 and 23-26 are pending in this office action.

## Response to Amendment/Arguments

- 5. Applicant's arguments filed 01/26/2006 have been fully considered but they are not persuasive.
- 6. Particularly, the examiner asserts the amended elements of the claims are also within the scope of the Lawson reference as outlined in the rejection below.
- 7. Additionally, applicants appear to be arguing that Lawson and Kleewein are not analogous art on page 7 of the remarks. Particularly, applicants state "there is no motivation or teaching to combine Lawson with the Kleewein reference because Lawson describes event notification and delivery in a computing environment, whereas Kleewein describes merging databases." The examiner agrees that Lawson in part describes 'event notification and delivery in a computing environment", but further contends that this functionality is implemented through the use and access of databases (In Lawson: Col. 8 lines 14-58 and Col. 10 lines 7-23). This includes the access of data related to both local and remote databases (local and global registries and caches of global registries). Kleewein is related to improving the access of multiple databases. Particularly the idea of joining information from a remote database with that of a local

database (Col. 1 lines 45-55 and Col. 2 lines 64-67 and Col. 3 lines 7-23). Clearly, Lawson and Kleewein are analogous art, and therefore, applicants arguments are not persuasive.

### Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 1-21 and 23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,185,613 by Lawson et al. (Lawson) in view of U.S. Patent 5,903,893 by Kleewein et al. (Kleewein).
- 10. With respect to Claim 1, Lawson teaches a method for providing an improved network monitoring system, the network monitoring system comprising an event database for storing event data representing events occurring on the network, the event data being gathered by a plurality of monitoring devices located at a plurality of different, remote locations on the network, the method comprising:

allowing users to insert one or more triggers into the event database (Col. 19 line 53 - Col. 20 line 2 and Col. 20 line 36 - Col. 19), the triggers automatically initiating a programmed response at the detection of a condition including gathered event data prior to insertion of the gathered event data into the event database (Col. 6 lines 7-23 and Col. 28 line 40 - Col. 29 line 29);

distributing the event database to a plurality of remote network locations (Col. 8 lines 14-58 and Col. 10 lines 7-23), wherein each remote network location stores a local table containing event data generated at the remote location (Col. 8 lines 36-58) and one or more replica tables containing event data generated at other remote locations (Col. 10 lines 7-23 and Col. 15 lines 14-32), and

using triggers and local and replica tables during delivery of event data to users of the network monitoring system (Col. 6 lines 7-23 and Col. 28 line 40 - Col. 29 line 29) wherein the local and replica tables update one another when the event data of one of said tables changes (Col. 10 lines 7-23, Col. 14 lines 29-28 and Col. 15 lines 14-32). Lawson further suggests that global information and local information could be stored in a common file or in some other format that achieves the essential functionality of the invention (Col. 8 lines 59-67).

However, Lawson does not explicitly disclose a union of the local and replica tables (cache of the global registry at each remote location) is generated to form a combined event database at the remote location. Kleewein teaches the union of a local and remote table to form a combined database (Col. 3 lines 7-23 and Col. 1 line 45 - Col. 2 line 23). The union of databases provides for transparent access to the data stored in both tables (Col. 1 lines 45-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Lawson and modify it as indicated by Kleewein such that the method further comprises wherein a union of the local and replica tables is generated to form a combined event database at the remote location

and using triggers and local and replica table unions during delivery of event data to users of the network monitoring system. One would be motivated to have this, as there is desire for enabling transparent access to data stored in multiple databases (In Kleewein: Col. 1 lines 45-56).

- 11. With respect to Claim 2, Lawson further teaches providing a notification component for registering similar client requests for event data and substantially contemporaneously delivering requested event data to all clients having similar registered requests (In Lawson: Col. 6 lines 7-23 and Col. 28 line 40 Col. 29 line 29).
- 12. With respect to Claim 3, Lawson teaches an event database for use in a network monitoring system, the event database storing event data representing events occurring on the network, the event data being gathered by a plurality of monitor devices located at a plurality of different, remote locations on the network, the event database comprising:

an automation engine for processing one or more triggers contained in the event database (Col. 19 line 53 - Col. 20 line 2 and Col. 20 line 36 - Col. 19), the triggers automatically initiating a programmed response at the detection of a condition including on gathered event data prior to insertion of the gathered event data into the event database (Col. 6 lines 7-23 and Col. 28 line 40 - Col. 29 line 29);

a local table stored at each remote network location containing event data generated at the remote location (Col. 8 lines 36-58); and

one or more replica tables stored at each remote network location containing event data generated at other remote locations (Col. 10 lines 7-23 and Col. 15 lines 14-

Application/Control Number: 09/910,676

Art Unit: 2155

32), and wherein the local and replica tables update one another when the event data of one of said tables changes (Col. 10 lines 7-23, Col. 14 lines 29-28 and Col. 15 lines 14-32). Lawson further suggests that global information and local information could be stored in a common file or in some other format that achieves the essential functionality of the invention (Col. 8 lines 59-67).

However, Lawson does not explicitly disclose a union of the local and replica tables (cache of the global registry at each remote location) is generated to form a combined event database at the remote location. Kleewein teaches the union of a local and remote table to form a combined database (Col. 3 lines 7-23 and Col. 1 line 45 - Col. 2 line 23). The union of databases provides for transparent access to the data stored in both tables (Col. 1 lines 45-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the event database disclosed by Lawson and modify it as indicated by Kleewein such that the event database further comprises wherein a union of the local and replica tables is generated to form a combined event database at the remote location. One would be motivated to have this, as there is desire for enabling transparent access to data stored in multiple databases (In Kleewein: Col. 1 lines 45-56).

13. With respect to Claim 4, Lawson teaches a method for handling event data from monitored sites in a computer network, comprising:

receiving event data from the sites at a monitoring location (Col. 6 lines 7-23 and Col. 28 line 40 - Col. 29 line 29);

Application/Control Number: 09/910,676

Art Unit: 2155

when received at the monitoring location, pre-processing the event data before the event data is inserted into an event database to determine if a condition is met as set forth in a trigger (Col. 6 lines 7-23 and Col. 28 line 40 - Col. 29 line 29); and

if the trigger condition is met, initiating an action relating to the event data, the action being defined in the trigger (Col. 6 lines 7-23 and Col. 28 line 40 - Col. 29 line 29);

inserting the event data into the event database thereby producing central data (Col. 8 lines 14-35 and Col. 28 line 40 - Col. 29 line 29); and

transmitting the central data to each of the monitored sites (Col. 10 lines 7-23 and Col. 15 lines 14-32):

wherein each of the monitored sites includes locally-generated event data (Col. 8 lines 36-58) and a replica of the central data (Col. 10 lines 7-23 and Col. 15 lines 14-32); and

wherein the monitored sites update one another when the event data of one of said monitored sites changes (Col. 10 lines 7-23, Col. 14 lines 29-28 and Col. 15 lines 14-32). Lawson further suggests that global information and local information could be stored in a common file or in some other format that achieves the essential functionality of the invention (Col. 8 lines 59-67).

However, Lawson does not explicitly disclose a union of the locally-generated event data and the central data is formed at each of the monitored sites. Kleewein teaches the union of a local and remote table to form a combined database (Col. 3 lines

7-23 and Col. 1 line 45 - Col. 2 line 23). The union of databases provides for transparent access to the data stored in both tables (Col. 1 lines 45-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Lawson and modify it as indicated by Kleewein such that the method further comprises wherein a union of the locally-generated event data and the central data is formed at each of the monitored sites.

One would be motivated to have this, as there is desire for enabling transparent access to data stored in multiple databases (In Kleewein: Col. 1 lines 45-56).

- 14. With respect to Claim 5, Lawson further teaches wherein pre-processing the event data comprises determining whether the event data comprises a duplication of other event data in the event database or received at the monitoring location (In Lawson: Col. 17 lines 6-21).
- 15. With respect to Claim 6, Lawson further teaches initiating the action comprises denying storage of the event data in the event database if it comprises a duplication of other event data (In Lawson: Col. 19 lines 22-42).
- 16. With respect to Claim 7, Lawson further teaches wherein if the event data does not meet the condition, it is temporarily stored outside the data source (In Lawson: Col. 21 lines 8-18, Col. 23 line 60 Col. 24 line 6 and Col. 26 lines 25-35).
- 17. With respect to Claim 8, Lawson further teaches wherein for even data received at the monitoring location, a query is executed, and a condition is evaluated, which, if true, causes the execution of the action (In Lawson: Col. 23 line 60 Col. 24 line 6 and Col. 24 lines 20-41).

Application/Control Number: 09/910,676

Art Unit: 2155

18. With respect to Claim 9, Lawson further teaches wherein the action comprises at least one of a sequence of Structured Query Lanaguage (SQL) statements and an external script (In Lawson: Col. 6 lines 7-23 and Col. 28 line 40 - Col. 29 line 29)

Page 9

- 19. With respect to Claim 10, Lawson further teaches wherein the trigger has a coupling mode that indicates when the action should be executed (In Lawson: Col. 24 lines 20-41 and Col. 26 lines 17-24).
- 20. With respect to Claim 11, Lawson further teaches wherein the trigger allows an administrator of the network to connect events, conditions and actions (In Lawson: Col. 10 lines 24-56).
- 21. With respect to Claim 12, Lawson i further teaches wherein the event data comprises a primitive event (In Lawson: Col. 11 lines 9-26).
- 22. With respect to Claim 13, Lawson further teaches wherein the event data comprises a database event (In Lawson: Col. 11 lines 9-26).
- 23. With respect to Claim 14, Lawson further teaches wherein the event data comprises a temporal event (In Lawson: Col. 11 lines 9-26).
- 24. With respect to Claim 15, Lawson further teaches wherein the trigger comprises a database trigger (In Lawson: Col. 6 lines 7-23 and Col. 28 line 40 Col. 29 line 29).
- 25. With respect to Claim 16, Lawson further teaches wherein the trigger comprises a temporal trigger (In Lawson: Col. 6 lines 7-23 and Col. 28 line 40 Col. 29 line 29).
- 26. With respect to Claim 17, Lawson further teaches wherein the temporal trigger signals an event at a determined frequency from a specified start time until a specified

end time (In Lawson: Col. 6 lines 7-23, Col. 24 lines 20-41 and Col. 26 lines 17-24, also see claim 8).

- 27. With respect to Claim 18, Lawson further teaches wherein initiating an action comprises communicating a message in accordance with the event data to at least one customer location that has subscribed to receive the event data, and storing the event data in a data store at the monitoring location (In Lawson: Col. 28 line 40 Col. 29 line 29 and Col. 10 lines 7-23).
- 28. With respect to Claim 19, Lawson further teaches wherein the pre-processing occurs, at least in part, during a period when the data store is inaccessible (In Lawson: Col. 10 lines 57-67).
- 29. With respect to Claim 20, Lawson further teaches wherein the message communicated in accordance with the event data is included in the union of at least event data of a local network and event data of a remote network (In Lawson: Col. 8 lines 14-58 and Col. 10 lines 7-23)
- 30. With respect to Claim 21, Lawson further teaches wherein the union comprises a union of event data tables (In Lawson: Col. 8 lines 14-58 and Col. 10 lines 7-23)
- 31. With respect to Claim 23, Lawson further teaches wherein the monitoring locations update one another with their event data (In Lawson: Col. 10 line 7-23 and Col. 28 line 40 Col. 29 line 29).
- 32. With respect to Claim 25, Lawson teaches a system for handling event data from monitoring sites in a computer network, comprising:

means for receiving event data from the sites at a monitoring location (Col. 6 lines 7-23 and Col. 28 line 40 - Col. 29 line 29);

means for pre-processing the event data, when received at the monitoring location, to determine if a condition is met for setting a trigger (Col. 6 lines 7-23 and Col. 28 line 40 - Col. 29 line 29);

means for communicating a message, if the trigger is set, in accordance with the event data to at least one customer location that has subscribed to receive the event data and storing the event data in a data store at the monitoring location(Col. 6 lines 7-23 and Col. 28 line 40 - Col. 29 line 29);

means for inserting the event data into the event database thereby producing central data (Col. 8 lines 14-35 and Col. 28 line 40 - Col. 29 line 29); and

means for transmitting the central data to each of the monitored sites (Col. 10 lines 7-23 and Col. 15 lines 14-32):

wherein each of the monitored sites includes locally-generated event data (Col. 8 lines 36-58) and a replica of the central data (Col. 10 lines 7-23 and Col. 15 lines 14-32); and

wherein the monitored sites update one another when the event data of one of said monitored sites changes (Col. 10 lines 7-23, Col. 14 lines 29-28 and Col. 15 lines 14-32). Lawson further suggests that global information and local information could be stored in a common file or in some other format that achieves the essential functionality of the invention (Col. 8 lines 59-67).

However, Lawson does not explicitly disclose a union of the locally-generated event data and the central data is formed at each of the monitored sites. Kleewein teaches the union of a local and remote table to form a combined database (Col. 3 lines 7-23 and Col. 1 line 45 - Col. 2 line 23). The union of databases provides for transparent access to the data stored in both tables (Col. 1 lines 45-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the system disclosed by Lawson and modify it as indicated by Kleewein such that the system further comprises wherein a union of the locally-generated event data and the central data is formed at each of the monitored sites.

One would be motivated to have this, as there is desire for enabling transparent access to data stored in multiple databases (In Kleewein: Col. 1 lines 45-56).

33. With respect to Claim 26, Lawson teaches an event database for use in a network monitoring system, the event database storing event data representing events occurring on the network, the event data being gathered by a plurality of monitor devices located at a plurality of different, remote locations on the network, the event database comprising:

a local table stored at each remote network location containing event data generated at the remote location (Col. 8 lines 36-58);

one or more replica tables stored at each remote network location containing event data generated at other remote locations (Col. 10 lines 7-23 and Col. 15 lines 14-32); and

means for updating the local and replica tables when the event data of one of said tables changes (Col. 10 lines 7-23, Col. 14 lines 29-28 and Col. 15 lines 14-32). Lawson further suggests that global information and local information could be stored in a common file or in some other format that achieves the essential functionality of the invention (Col. 8 lines 59-67).

However, Lawson does not explicitly disclose a union of the local and replica tables (cache of the global registry at each remote location) is generated to form a combined event database at the remote location. Kleewein teaches the union of a local and remote table to form a combined database (Col. 3 lines 7-23 and Col. 1 line 45 - Col. 2 line 23). The union of databases provides for transparent access to the data stored in both tables (Col. 1 lines 45-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the event database disclosed by Lawson and modify it as indicated by Kleewein such that the event database further comprises means for generating a union of the local and replica tables to form a combined event database at the remote location. One would be motivated to have this, as there is desire for enabling transparent access to data stored in multiple databases (In Kleewein: Col. 1 lines 45-56).

- 34. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lawson in view of Kleewein as applied to claim 4 above, and further in view of U.S. Patent 6,341,340 by Tsukerman et al. (Tsukerman).
- 35. With respect to Claim 24, Lawson in view of Kleewein teaches all the limitations of Claim 4 but does not explicitly disclose at least one monitoring location is enabled to take ownership of a replica of remotely-generated event data to make modification thereto without instructions from the remote monitoring location associated therewith.

Tsukerman teaches the use of ownership in the case where a database may be shared between multiple locations (Col. 6 lines 13-33 and Col. 7 line 37 - Col. 8 line 22). When a location is given ownership of a database (Col. 7 lines 15-28 and Col. 8 lines 50-62), the location can make modifications to the database without instructions from any other associated location (Col. 8 lines 4-22). This allows for better performance in database operations (Col. 2 lines 6-14 and 45-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Lawson in view of Kleeweing and modify it as indicated by Tsukerman such that the method further comprises wherein at least one monitoring location is enabled to take ownership of a replica of remotely-generated event data to make modification thereto without instructions from the remote monitoring location associated therewith. On would be motivated to have this, as it is desirable to have performance advantages (In Tsukerman: Col. 2 lines 6-14 and 45-56).

Application/Control Number: 09/910,676 Page 15

Art Unit: 2155

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Lazaro April 10, 2006

SUPERVISORY PATENT EXAMINER